GrummanWorld

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NASA, Contractors Plan For Possible Budget Cuts In Space Station Funding

Grummanites in the Space Station Program Support Division are supporting NASA in developing alternatives in case the space station becomes the object of the budget cutter's knife.

In July, a House Appropriations subcommittee took a major step toward cutting funds for the planned space station *Freedom*. "The Appropriations subcommittee has requested a NASA response to a reduction in funding over the next two years: $400 million in fiscal '90 and $600 million in fiscal '91," says Division President Fred Haise.

A NASA-led team, which includes the major participants in the production of the space station, has been working on "what-ifs" since then. It has come up with ideas for a rephased space station that could be built with the smaller budget Congress may produce.

For example, the team suggested cutting the crew size from eight to four. Power requirements would also be cut in half. NASA would drop plans to develop a new space suit. Instead, it would use the suit designed for the space shuttle. Other options are fewer

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Cited For Excellence. *At the Kennedy Space Center in Florida, data analyst Lynne Wiegand monitors a software test in Firing Room 2. The Technical Services Division is a finalist for this year's NASA Excellence Award for Quality and Productivity. More on page 4.*

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FY '90 Budget Battle Resumes This Week On Capitol Hill

It's crunch time. A decision on the fate of new production of F-14D's will be made over the next few weeks.

Congress is back from its August recess and now has to come up with final fiscal 1990 defense authorization and appropriations bills to send to the President for his signature.

"This month will be the toughest we will face," says Peter Barry, vice president-Washington Operations.

Earlier this summer the House and Senate both passed versions of the authorization bill. The House version contains funding for new F-14D production while the Senate's does not. Conferees are going to sit down together beginning the week of September 11 and hammer out the differences between the two. The conferees' bill must then be approved by the House and Senate before the bill goes to the President. The conferees' work could be completed within a couple of days, though the issues are so volatile this year that anything could happen.

"There could be a deadlock in conference," Barry says. "They could come out with no compromise bill and have to go back and start over. That's rare, but this year anything is possible."

Defense Secretary Dick Cheney left no doubt which version the Bush administration wants to see prevail. In an August 23 speech at the national convention of the Veterans of Foreign Wars, Cheney said, "The House diverted your tax money away from critically important strategic programs and voted to spend it instead to protect jobs in selected home districts. I urge Senate-House conferees to follow the Senate and restore the President's priorities."

Cheney also took his message directly to the Senate, where this month the Senate Appropriations defense subcommittee and the full committee will draft and vote on the bill to set aside funds for defense programs. It's expected that the Senate's version of this bill, which will be marked up during the week of September 11, will mirror the Senate's authorization bill. It is similar to what the administration had requested in its original budget proposal.

The defense secretary wrote to Senator Robert Byrd, the chairman of the Senate Appropriations Committee, last month. Cheney wrote, "I am deeply concerned by the large number of program changes made by the House and the devastating effect these

(Continued on page 3)

IRS Forces Changes In EIP For Some Members

The Internal Revenue Service (IRS) has once again spurred changes in the Grumman Employee Investment Plan (EIP). Those people whose total 1988 compensation from Grumman was over $52,235 are affected. The EIP office has notified these people by mail.

The IRS has very strict regulations about how much money people can contribute to the EIP. These regulations are designed to preclude discrimination between higher and lower paid employees in the administration of corporate benefit programs.

Federal regulations require that Grumman conduct "non-discrimination" tests for both deferred (pretax) and regular (after-tax) EIP contributions. These tests ensure that the average EIP contribution rate of higher paid employees does not exceed the lower paid group, according to IRS specifications.

Historically, the results of these tests have limited the percentage that certain employees may contribute to the deferred compensation plan option (DCO).

However, recent discrimination tests show both the regular and the deferral contributions of the higher paid group are exceeding the contributions of the lower paid group at a rate which will fail the IRS tests if allowed to continue.

"Immediate action had to be taken to correct this imbalance or both Grumman and those higher paid Grummanites would suffer serious tax consequences at the end of the year," says Mike DeVito, manager of Pension and Investment plans.

As a result, those affected Grummanites will notice changes in their first paychecks of September: yesterday if paid weekly; next Thursday, September 14, if paid biweekly.

For the remainder of the year, their EIP contributions are limited to four percent in DCO and four percent in regular contributions.

Higher paid group members who are not currently contributing at a four percent rate to either DCO or regular portions of the plan will not be permitted to increase their contributions up to the new four percent limit.

On January 1, 1990, the contribution rate will automatically be returned to what it was before this reduction. However, both DCO and regular contributions will be limited to seven percent each.

Changes have also been made in the rules concerning lump sum deposits into the EIP. Because the average contribution rates are affected not only by payroll deduction but by lump sum contributions as well, members of the higher paid group are prohibited from making such contributions to the EIP as of August 25.

The days of lump sum contributions are limited for the lower paid group, too. Those whose total 1988 compensation from Grumman was less than $52,235 will not be allowed to make lump sum contributions to the EIP starting January 1, 1990.

"We regret any inconvenience that these actions may cause," says DeVito, "but we trust that EIP members will understand the importance of complying with IRS regulations."

Precision Craft. *Lino DiMeo works for the Tooling Department in Building 2, Bethpage, Long Island. He is using a jig borer to copy an aircraft part template. This particular part is for an E-2C shelf assembly. The clock-like device on the machine's spindle is a gauge used to center the borer bit. (Photo by Bob Settles)*

Who, What, When?

Who's affected?

All Grumman employees whose total 1988 compensation was $52,235 or more.

What?

- Both your DCO and regular (after-tax) contribution rates will be reduced to four percent.
- If you are not currently contributing at the four percent rate to either the DCO or regular portions of the plan, you will not be permitted to increase your contributions up to the new four percent limit.
- Because average contribution rates are affected not only by payroll deduction but by lump sum contributions, higher paid group members are prohibited from making lump sum contributions to the EIP as of August 25.

When?

First paycheck of September. On Thursday, September 7, if you are paid weekly; on next Thursday, September 14, if you are paid biweekly.

What happens in 1990?

Your contribution rate will automatically be returned to what it was before this reduction, except that both DCO and regular contributions will be limited to seven percent each. In addition, all EIP members regardless of what group they belong to will not be allowed to make lump sum contributions to the EIP.

Whom do I call if I have questions?

Call the Employee Investment Plan Office at (516) 575-7250.

Obituaries

Jules Harris of Small Parts Fabrication, Bethpage, Aircraft Systems Division, died August 15 at the age of 64. He had been with the company since 1965 and resided at 47-27 295th Pl., Bayside, N.Y.

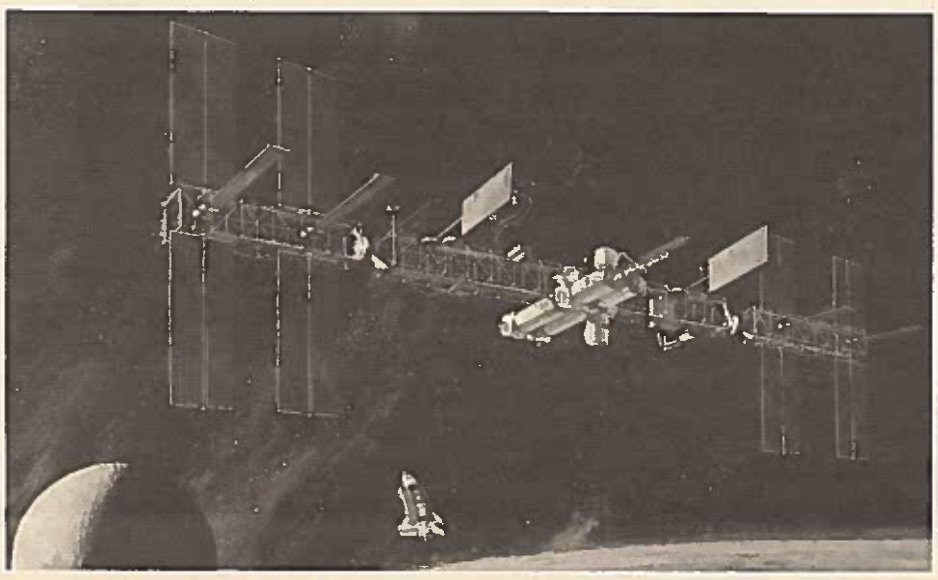
Grumman To Close Tachonics

On August 23, Grumman announced that it will close Tachonics by the end of this year. Tachonics in Plainsboro, New Jersey, is a unit of the Electronics Systems Division. It manufactures gallium arsenide components for sale to the commercial electronics industry.

Tachonics will complete all existing contracts but no new orders will be accepted. The business unit employs 47 people. About 15 employees will be asked to stay long enough to close out the business. The remainder will be laid off with severance benefits.

Tachonics was formed in 1985 to design and manufacture integrated circuits from gallium arsenide for high speed electronics applications. Tachonics markets multi-application switches and amplifier circuits to subsystem manufacturers and distributors. These are used for both standard and semi-custom microwave and digital applications.

For the past several months, Grumman has unsuccessfully sought a buyer for Tachonics. Grumman Electronics Systems will continue to design gallium arsenide circuits for Grumman's defense and space requirements.



Coming Soon. *This is the latest artist rendering of space station* Freedom.

Space Station Update

(Continued from page 1)

external attachment points on the station, smaller observatory areas, and even the elimination of the washer, drier and dishwasher. All of these capabilities would be phased into the program later, offsetting costs over the next two years.

None of this has yet come to pass and the space station team is going ahead with work on the current space station *Freedom* configuration. Any changes will not be made unless the fiscal 1990 budget legislation has less funds than NASA had requested. House-Senate conference committees will go to work on the authorization and appropriations bills after Labor Day.

Congress Reconvenes; Budget Battle Resumes

(Continued from page 1)

changes have on the defense priorities we have set."

He warned that the President would veto any defense bills that were similar to the House authorization and appropriations bills. These bills cut or eliminated the B-2 Stealth bomber, the Midgetman missile and other strategic programs and funded programs such as the F-14D and the V-22 Osprey. Cheney, quoting House Armed Services Committee chairman Les Aspin, said these decisions were "irrational."

While the administration has been keeping the pressure on members of Congress, Grumman used the August recess to keep its message fresh before members of Congress.

Barry and his staff wrote to subcontractors in every state represented by a senator on the Senate Armed Services Committee. Those senators will be the Senate conferees for the authorization bill discussions with the House. When the Senate Armed Services Committee voted on an amendment to add new production F-14D funding to its bill, seven of the 20 committee members voted for it, and another two senators supported a second F-14D amendment. "But there's no way to guarantee that they will still support us," Barry cautions. "On the other hand, we might pick up additional support."

The Grummanites in Washington Operations have also been talking to committee staff members and preparing position papers to give to representatives and senators once they return to Washington. They plan to turn on one last grass-roots letter writing campaign from states with key members of Congress. They are also ready to produce papers that will show the impact of various budget decisions on the company as they are considered by the committees.

"There's a lot we're going to be doing," Barry says. "September is a big month."

What About E-2C's?

The House's version of the fiscal year 1990 defense authorization bill funds four new E-2C's. However, the House denied the defense secretary's request for a multiyear buy of 40 E-2C's from fiscal 1990 through 1994 (four in 1990 and nine for the next four years). The House did authorize advanced procurement funds for nine E-2C's in fiscal 1991.

The Senate's authorization bill funds four new E-2C's and the multiyear buy of E-2C's.

Meanwhile, the House Appropriations Committee has approved funding for four E-2C's. It didn't contain any funds for a multiyear buy of E-2C's, but it did approve advanced procurement funds for six E-2C's in 1991.

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Keeping Score In Budget Battle

As of September 1, 1989

$ in millions

	Cheney Budget	House Authorization Bill	Senate Authorization Bill	House Appropriations Bill
F-14D	$688.6 for six	$857 for 12	$688.6 for six	$1263.6 for 24
EA-6B	$105*	$215 for four	$105 *	$423.2 for 12
E-2C	$261.2 for four	$261.2 for four	$261.2 for four	$261.2 for four

* EA-6B funds are for advanced procurement of ADVCAP Prowlers and for development costs related to the ADVCAP

Note: House and Senate conferees will meet next week to iron out differences in the authorization bill.

Grumman's Space Shuttle Team A Finalist For NASA Quality Award

The Countdown Begins. *Barbara Buchholtz, master console analyst, and James DePena, test engineer, monitor tests of launch-pad ground support equipment for next month's launch of the space shuttle* Atlantis.

KENNEDY SPACE CENTER, Florida — When the space shuttle *Discovery* lifted off last fall for the first time since the 1986 *Challenger* disaster, the nation and the world rejoiced. For the people who work here, that launch and the four subsequent ones have restored the pride that was once so evident on the shuttle program.

Lately, the Grummanites at the Cape have been even prouder: the Technical Services Division has been named a finalist for the 1989 NASA Excellence Award for Quality and Productivity [see box for list of other finalists].

"This award means a great deal to Grumman," says Skip Olson, Grumman's vice president - Shuttle Operations and Engineering Services. "Everybody here has worked hard to make NASA aware of the professionalism and level of dedication of the Grumman team.

"Winning this award would bring the company a lot of prestige and good will," he continues. "But just being named a finalist is a big honor. If we don't win, we'll try harder next year."

The Grummanites who work on the Shuttle Operations and Engineering Services contract operate and maintain the computers and software used to prepare and launch the space shuttle. They are also responsible for instrumentation at the launch site and equipment calibrations.

Here at the Kennedy Space Center are constant reminders that the eyes of the world are upon you. Not 100 yards from Olson's office window is the press site, from which the TV networks and press cover shuttle launches.

Across the street is the 55-story Vehicle Assembly Building, where the shuttle and its booster rockets are mated and tested. Three miles away are the launch pads. In such a setting, quality has to be the No. 1 concern of everybody.

NASA began its Excellence Award for Quality and Productivity four years ago. Companies are graded on customer satisfaction, contract performance, quality and productivity, health and safety, energy conservation, management commitment to quality, and communication.

"The space agency has responded to a challenge by the president of the United States to restore the quality of U.S. products," says Olson. As a result, NASA zealously promotes quality enrichment and employee participation programs among its contractors.

The Technical Services Division has been one of the top participants in Grumman Quality (GQ) since it was launched a year ago. [see sidebar] In addition, Technical Services people have been avid participants in other quality efforts, notably quality circles, employee suggestion programs, and NASA's own productivity improvement/quality enrichment teams.

"All those are still in place," says Olson. "But GQ is a step beyond. It provides the top-down support and the resources needed to train our entire work force and enlist them in making further improvements."

About 50 of some 4,000 NASA contractors applied for the award. The competition was narrowed to 25 semifinalists, who submitted detailed reports. The eight finalists were then visited by a group of NASA quality experts, called a "validation team."

The team spent two days at Grumman. Each member of the validation team got a copy of the 30-page Grumman report, with each section cross-referenced to supporting data in the files. They talked to dozens of Grummanites about the quality of their work and the company as a whole.

"They were very surprised that we turned them loose for two days," says Ray McCormick, deputy director-Engineering Support. "And because they didn't have to search for facts, the team members could devote much more time to talking with our people."

One of the points borne out in this report is that Grumman has consistently earned "superior" and "excellent" marks in its periodic reviews by NASA and prime contractor Lockheed. The wall in the conference room where the validation team spent much of its time is also covered with all kinds of awards attesting to this excellence.

"GQ provides resources to train our entire work force and enlist them in making improvements."

In addition, the Grumman team has stayed within budget. In fact, some departments have had underruns of 15 percent. Much of that gain in productivity comes from Grummanites' computer software innovations.

The Competition

On October 31, Vice President Dan Quayle will present the 1989 NASA Excellence Award for Quality and Productivity. This presentation will be part of the Sixth Annual NASA Contractors Conference in Huntsville, Alabama.

Also in the running for the NASA award are: Barrios Technology, Houston, Texas; Boeing Computer Support Services, Huntsville, Alabama; Lockheed Engineering and Sciences Company, Houston, Texas; Bendix Field Engineering Corporation, Columbia, Maryland; Computer Sciences Corporation, Houston, Texas; EG&G Florida, Inc., Kennedy Space Center; and Rockwell Space Transportation Systems Division, Downey, California.

Last year's award recipient was the Rocketdyne Division of Rockwell International, Canoga Park, California.

Ready, Set, Go. *Data analyst/specialist Diane Ezak checks a test program running on a front-end processor. These computers monitor Firing Room equipment.*

"We use systems that are 15 to 20 years old, so we constantly look to upgrade test hardware and software," says McCormick.

In the Vehicle Assembly Building, the NASA validation team watched *Columbia* being prepared for the launch that took place last month. The Grumman crew is now readying *Atlantis* for its launch in October.

Inside this giant complex of staircases and scaffolds, Grummanites install and repair the instrumentation used to record environmental effects on the exterior surfaces of the shuttle. They also work on ground support equipment. The 1986 *Challenger* disaster dramatically increased the measurements needed — from about 160 to over 700.

Grumman was able to handle the work without increasing staff by developing better system software to handle this information. Furthermore, each measurement gauge or instrument now is assigned to a specific technician, rather than being handled by several people before launch. This makes for less mishandling or damage — this equipment now lasts a minimum of three launches instead of the previous one or two.

The Grummanites' pride may be difficult to measure, but is hard to miss. You see quite a few people wearing their "GQ" pins — a few have even pinned them to their visor caps. There also is a button being distributed that reads simply, "excellence."

Technical Services carefully cultivates this pride through communication. Monthly and quarterly reports get distributed to all managers and supervisors; then, the information is discussed at departmental "all-hands" meetings, held every two weeks.

"Being named a finalist for this award is something everybody who works for Grumman can be proud of."

"We perform a lot of routine tasks, and some people have been doing these jobs for years and years," says Stephanie Burnette, administration supervisor. "A few have gotten five-year pins from four or five different companies at the Cape. You have to motivate people, keep them up-to-date on the program's goals."

While GQ teams in other divisions are setting up employee recognition programs, Technical Services already has a wide range of these. They range from employee and supervisor of the month to an award called "quiet excellence."

"Quiet excellence is for the person who isn't a boss, who doesn't work in a visible place, and who doesn't blow his or her own horn," says Norma Shear, coordinator for Quality/ Productivity. "The person who gets this award is the unsung excellent worker."

The shuttle contract team operates with the premise that there can never be too *much* employee participation and communication. It recently began two new programs: job shadowing and dialogue.

In job shadowing, a Grumman manager or director works with an employee in his or her assigned area for four to eight hours. The manager will then, when possible, perform the actual task. In dialogue, a senior manager has a series of one-hour meetings with a group of Grummanites each month. They are selected at random and discuss their interests and concerns.

Even if Grumman doesn't win the NASA award, the nomination process has enabled the team to get a handle on its strengths — as well as a few weaknesses. "We need a way to collect better trend data," says McCormick, "for instance: how long the measurement systems last and what items need repair most often. Some of our labs keep such data, others don't. That's not to say lab managers don't know what the trends are — just that the documentation is lacking."

At the end of its visit, the NASA validation team gave Technical Services people some preliminary feedback. Among other remarks, it called the division's performance on the shuttle contract "outstanding."

"You can't work at the Cape without having a huge sense of pride," says Shear. "But being a finalist for this award is something everybody who works for Grumman can be proud of."

Making It Happen. *In the Launch Control Complex, senior data analyst Chuck Frey monitors an instrumentation test on a printer/plotter. In these tests, the instrumentation for next month's shuttle launch is checked out. Above L, technician Charlie Farmer repairs an electronic black box for the upcoming launch. (Photos by Bob Settles)*

GQ Makes The Job Easier For Everybody

The Launch Control Complex at Kennedy Space Center is where space shuttle liftoffs are monitored. There are four firing rooms, full of data monitors and telemetry equipment. Keeping them in operation are floors of powerful computers.

Lisa England is a senior documentation coordinator for the Integrated Checkout Control and Monitoring Subsystem, one of these big behind-the-scenes complexes. England is one of about 500 of the 750 Grummanites at the Cape who have completed the introductory GQ training course.

GQ Means Grumman Quality

England's group keeps records of equipment tests and any problems that occur. She is now on a GQ action team that aims to streamline two important documents: test preparation sheets and standard practice instructions.

"My opinion counts through GQ," says England. "You come out of the training course wanting to do something. I have a selfish reason for wanting it to succeed: if it helps Grumman, it helps all of us here."

Robin King, a data analyst trainee in the next room, has worked for Grumman four and a half months. She also finished her GQ class and looks forward to joining an action team.

"I was impressed that Grumman went to the trouble to train everybody, that it cares so much about quality," says King.

Tom Kanteras, a lead analyst, recently signed up for an action team. "The shuttle disaster in 1986 made people realize they must constantly improve the way they work," he notes. "Before, the work had become too routine. Afterward, people at the Cape felt we had to prove ourselves to the world again.

"I've already seen quality improve," says Kanteras. "When someone changes something for the better instead of just passing the buck, it just makes the job easier for everybody."

From Satellites To Supersonic Planes, Future Products Take Shape In Wood Shop

The scents of sugar pine, mahogany, and maple surround you as you walk through Aircraft Systems' Wood Shop in Building 5 in Bethpage. The shop builds mockups of just about anything the company plans to produce.

"We get a glimpse of the future before anyone else does," says George Carrasquillo, a carpenter in the shop. "We build things that have never been seen before."

"All the aircraft flying today started out as mockups," says Paul Bach, the shop's foreman.

Is the seat comfortable? Will there be enough leg room? Is the heads-up display positioned in the right place? These are some of the questions a mockup can answer.

"There wouldn't be development programs without the Wood Shop," says Tom Wynne, manufacturing manager. "The mockups allow us to carefully study, evaluate and solve problems that might come up on the actual product."

Aircraft mockups are not the only kind built in this shop. The group built a fake antenna for the Joint STARS aircraft. The mock antenna was placed in the aircraft to make sure that when it rotated it did not interfere with any other wiring on the plane. An F-14 engine line mockup was another recent project.

"GE sent us the mockup engine for the F-14 and we ran all the lines to and from the engine," says Bach. "By following an engineer's drawing, each line is made with the same bends and twists the real ones will have. This helps ensure that they will fit correctly."

The Wood Shop has built a number of space mockups, too. The most recent is the Boost Surveillance and Tracking System (BSTS). It is now on display at the new Sensor Test and Integration Laboratory in Bethpage.

"We built a space station command center mockup with space for all the control panels and a big window," explains Bach. "A screen was set up behind the window and a film was shown to simulate what you would see out the window if you were in space."

Wood is not the only material they work with. The shop also builds sheet metal prototypes. "Small parts are pressed here for the first time," says Tony Way, a 40-year Grummanite. "If the prototype works, the part goes into production."

"I guess you could call us a shop-of-all-trades," says carpenter Dominick Abbate. "Wood working, fiberglass or metal work — you name it, we can build it."

Al Brown has been in the shop for 29 years. He helped build the first mockup of the Lunar Module. "Today's projects are just as exciting to work on," he says.

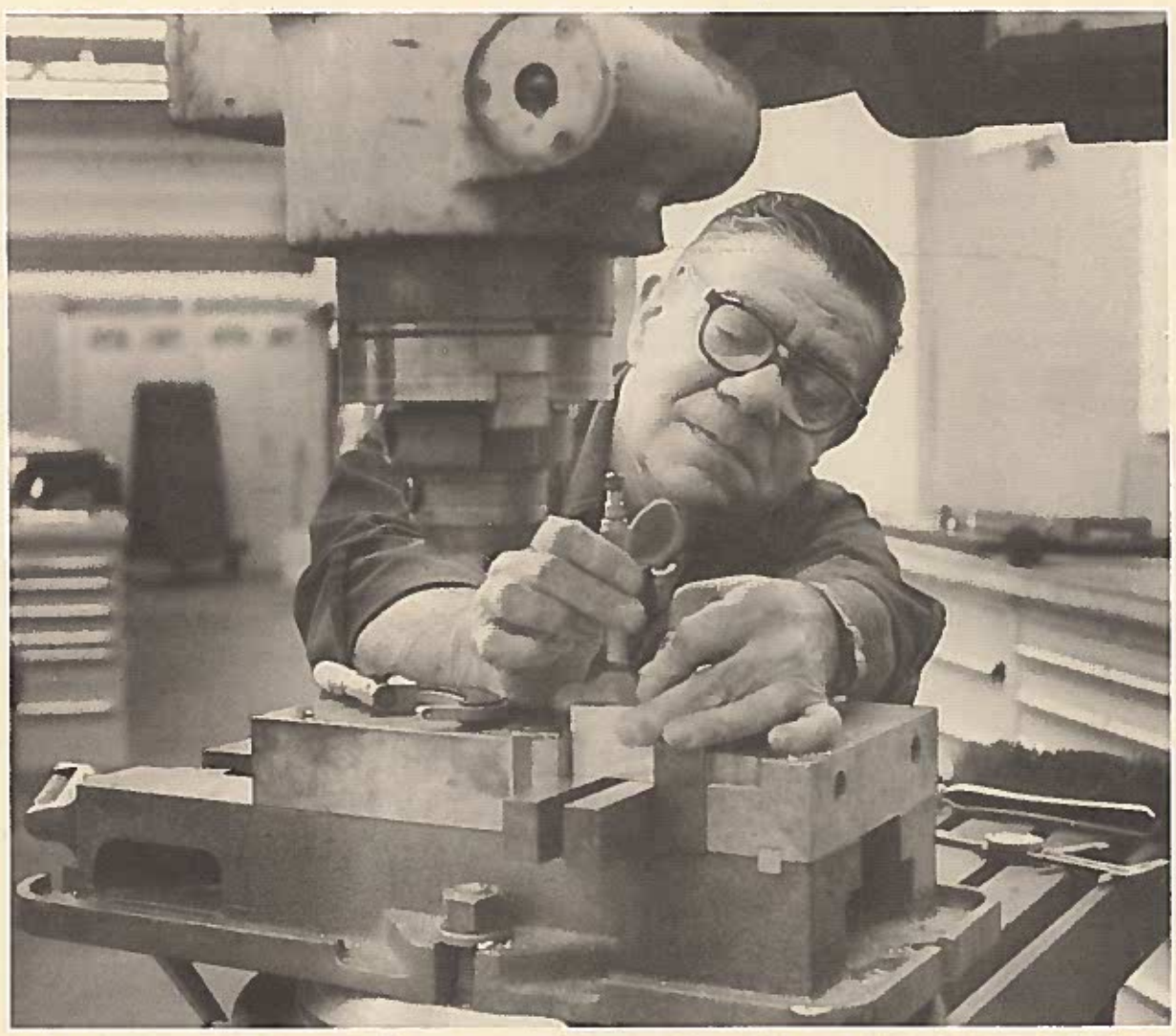
While some in the group enjoy working on the space projects most, others are convinced that the most exciting project was the X-29. Not only did they get to build it, but several accompanied the mockup around the country to help set it up at exhibits.

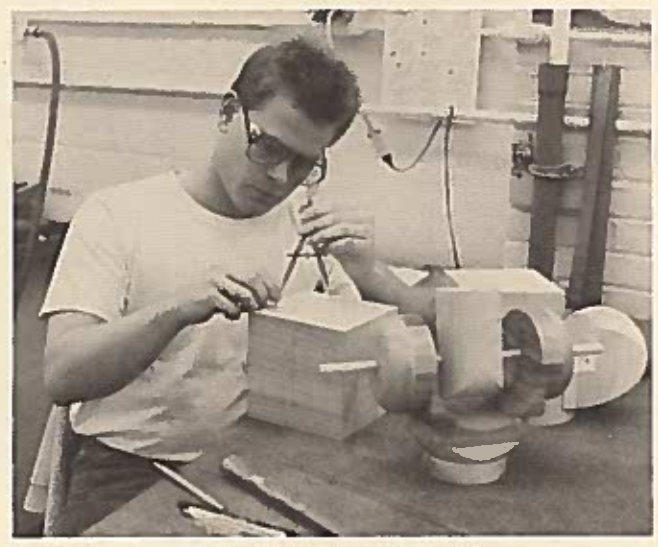
"I keep a photo album of the trip in my desk drawer," says Bob Overton. "We are all proud of that aircraft."

Stan Coryell, an engineer in Space Systems, holds a mockup of a hand control he just picked up from the shop. "Do you think the thumb will be comfortable in this position?" he asks a fellow designer.

"We'd be dead without the Wood Shop," he adds. "They work with you until the design is exactly right."

High-Tech Carpentry. *Members of the Wood Shop who built this mockup of the Boost Surveillance and Tracking System (BSTS) satellitewere (L to R) Carl Nivolo, Glenn Walton, George Carrasquillo, Charlie Pellegrino, Scott Lewis, and Allen Brown.*





Future Shapes. *John Ingrassia (above) sets a milling machine while Scott Lewis (at lower R) builds a mockup of a robot. Allen Brown (at upper R) planes a wooden part for another project.*

Opportunity For Awareness

What are the needs of people with disabilities? What is the company doing for Grummanites who have disabilities?

Grumman's Equal Opportunity Development group will host a forum where these and other topics concerning people with disabilities will be discussed.

The meeting — being held in observation of National Disability Employment Awareness Month — is open to those who may hire or work with people with disabilities. Grummanites who themselves have disabilities are invited. Grumman and members of the Industry-Labor Council on Employment and Disability will speak.

The meeting will be held on October 12, from 9-11 a.m., in the Headquarters auditorium. Seating is limited, so please call Bart Brophy at 575-2728 to reserve a place.

Appointments

Aircraft Systems

Integrated Logistics Support: John Zbytnieski, technical specialist, Software Development.

Material Operations: Robert D'Andrea, supervisor, End-User Computing.

Parts Fabrication Center: William J. McKenna, production manager, Sub-Assemblies.

Corporate Services

Administrative Services: Robert W. Odom, assistsnt manager, Reprographics Service Center Operations.

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People

Blue And Grey

BENTON PARK, Pennsylvania — About a dozen Grummanites here are "veterans" of such Civil War battles as Gettysburg, New Market, and Bull Run.

They participate in two-day reenactments of Civil War battles, portraying Battery A of the First Tennessee Light Artillery Regiment. These reenactments aim to be totally authentic, right down to the gray wool Confederate uniforms worn by the men in the group.

"For two days, we live as if it were the 1860s," says Michael Dec, a manufacturing engineer and the regiment's commander. "Each day, a battle is staged, lasting one to two hours and based on records, diaries, and other accounts of the actual event.

"If a regiment was wiped out or taken prisoner in a particular battle, that will be reenacted," says Dec. "We fire blanks, but there's still a lot of flame and smoke."

First-aid people are in the rear echelons, because you can get burned if you aren't careful. But they usually attend to more cases of heat exhaustion than anything else.

"Most reenactments take place in the summer, so you get very, very hot and sweaty in those uniforms," says Dec. "The fabric is almost like a wool blanket. But that is the way it was done in the Civil War, and after you wear the uniform for two days, you don't notice it anymore."

Back at the tent, the Grummanites and their spouses use candles and cook over an open fire. "We even have our own tin cups and plates, just like Confederate soldiers," says Dec. "We end up eating a lot of stew-type concoctions. We all just throw whatever we've got into one big kettle."

Groups choose sides according to the type of equipment they own. The Benton Park regiment had built a replica of a Civil War cannon, then learned it was used by the Tennessee Confederates. The men's uniforms were purchased from a company that specializes in such memorabilia, but Dec's wife, Susan, sewed the women's dresses.

History Comes Alive. *At the 125th anniversary of the Battle of New Market (Va.) were: (bottom row, L to R) Michael Dec, Susan Dec, Cathy Foster, Scott Barhold, Kevin Dawson; (top row, L to R) Bob Browneski, Linda Browneski, Maura Christoffer, John Ferraro, Connie Kyle, and John Kyle. Michael Dec, Barhold, Dawson, Bob Browneski, Christoffer, Ferraro, and the Kyles work at Grumman Electronics Systems' Benton Park, Pennsylvania, facility.*

A group must submit a photograph, which is judged for realism, to participate in an event. Battle reenactments are used as background for films about the Civil War.

"I once went to a reenactment that was filmed for the TV movie 'North and South'," says Dec. "Our group just got a letter about another movie project that needs reenactors, but it's an 11-week shooting. None of us can take the time off from work."

Several Grummanites at the Salisbury, Maryland, facility also are involved in reenactments, attesting to the increased popularity of this hobby.

"It wasn't difficult at all to find people who wanted to form a group," says Dec. "The Civil War era was a very interesting period in our history, when two ways of life were very much in conflict."

Off the battlefield, these Grummanites lead very conventional, 20th Century lives. But that isn't true of all Civil War enthusiasts. "One man I know comes and goes from the reenactments in a horse and buggy, and he uses oil lamps at home, too," says Dec.

Scholarly Award

Data Systems' supervisor of accounting, Jean Peterson, earned the Academic Achievement in Finance Award from the State University of New York at Old Westbury.

Good Fellow

Grummanite Joe Popolo has been elected a fellow of the Institute of Environmental Sciences.

Popolo was cited for outstanding contributions to the Institute's management as well as for his innovations in the field of environmental testing of avionic equipment. Popolo is manager-Quality in Engineering for Grumman's Office of Corporate Technology.

Educational Effort

Grummanite Edward Blankenhorn has been reelected to the Board of Cooperative Educational Services - third supervisory district (BOCES III) of Suffolk County, New York. BOCES groups throughout New York State provide vocational education to local school districts.

Blankenhorn is a senior budget planner for the Electronics Systems Division. He works for the division's Simulation and Trainer Products group in Bohemia, Long Island.

Retiree Obituaries

Gerald R. Altmann of 55 Wall St., Farmingdale, N.Y., died July 29, 1989. He retired in 1984.

Roy E. Appelgate of 9178 W. Highland Pines Blvd., Lake Park, Florida, died July 25, 1989. He retired in 1982.

Garry C. Barker of 112 N. Vanguard Dr., Cocoa, Florida, died July 15, 1989. He retired in 1979.

Rudolph A. Bauer of 60B La Bonne Vie Dr., East Patchogue, N.Y., died August 23, 1989. He retired in 1965.

Anthony Benevento of 364 Idaho Ave., Massapequa, N.Y., died July 30, 1989. He retired in 1986.

Stanley Bentsen of 448 MacArthur Blvd., Hauppauge, N.Y., died August 9, 1989. He retired in 1984.

Albert E. Bernauer of 378 Syosset-Woodbury Road, Woodbury, N.Y., died June 21, 1989. He retired in 1957.

Joseph H. Boccuzi of 9 Derby Rd., Hicksville, N.Y., died July 30, 1989. He retired in 1983.

Torolf K. Bruu of Rt. 7, Box 10, Ringgold, Georgia, died June 30, 1989. He retired in 1975.

Stanley F. David of 248 Lindbergh St., Massapequa, N.Y., died August 17, 1989. He retired in 1984.

James Davie of 216 Kingston Dr., Ridge, N.Y., died July 31,1989. He retired in 1966.

Dominick J. Esposito of 471 Adirondack Dr., Farmingville, N.Y., died May 23, 1989. He retired in 1977.

Woodrow W. Holcomb of 102 East St., Jonesville, North Carolina, died August 10, 1989. He retired in 1977.

James Lahey of 123 A1, 15th St., Garden City, N.Y., died July 29, 1989. He retired in 1965.

Edward Malone of 194 Fulton St., North Babylon, N.Y., died July 26, 1989. He retired in 1989.

William T. Martin of 10216 Regal Dr., Largo, Florida, died August 1, 1989. He retired in 1971.

David Nutt of 2014 NE 24th St., Jensen Beach, Florida, died August 10, 1989. He retired in 1978.

Charles S. O'Connor of 38 Oaktree La., Huntington Station, N.Y., died May 23, 1989. He retired in 1987.

Walter Potocki of 252 Chestnut Ave., East Meadow, N.Y., died July 30, 1989. He retired in 1975.

Floyd Richardson of 2724 Miles Circle, East Point, Georgia, died August 11, 1989. He retired in 1987.

Geraldine Schilling of 6430 Oakland Dr., Milton, Florida, died August 17, 1989. She retired in Jan. 1989.

Nathaniel G. Thomas of 767 Maderia Ct., Kissimmee, Florida, died August 9, 1989. He retired in 1985.

Lawrence J. White of 12375 North Military Trail, Boynton Beach, Florida, died August 18, 1989. He retired in 1976.

Arthur I. Williams at Box 288, Rt. 6, Corinth, Mississippi, died July 10, 1989. He retired in 1987.

John Zaikowski of 15 Tenth St., Locust Valley, N.Y., died July 19, 1989. He retired in 1977.

Readership Survey

We don't want to do all the talking. We'd like to know what you think about the things you see in these pages. Your comments, suggestions and complaints are welcomed. Please take a few minutes and give us your opinions.

Article	Great	Good	Poor	Didn't Read
Budget battle (P. 1)	[ ]	[ ]	[ ]	[ ]
Space station (P. 1)	[ ]	[ ]	[ ]	[ ]
EIP (P. 2)	[ ]	[ ]	[ ]	[ ]
Technical Services (P. 4)	[ ]	[ ]	[ ]	[ ]
Wood shop (P. 5)	[ ]	[ ]	[ ]	[ ]

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Division.....

[ ] I am a retiree

Mail to: Grumman World, A22-GHQ
1111 Stewart Ave., Bethpage, N.Y. 11714

Are You Interested In Computer Graphics?

If you would like to apply computer graphics to your projects or to learn more about fellow Grummanites are doing in the world of computer graphics and image processing, there's a new group for you. Data Systems' Technology Department is forming GrumGraph — a special interest group on graphics. It's open to all Grummanites. Its first meeting will be held on Thursday, September 14, from 9 a.m.-noon in the presentation room on the fourth floor of Building 237 in Woodbury.

GrumGraph seeks to broaden Grummanites' views of graphics in the company, to establish contacts with Grummanites who have special knowledge in this field, to stimulate research and to reduce redundancy in graphics work. Though the department is forming GrumGraph, the new group will be run by a membership-staffed steering committee of people from around the company.

For more information, contact Lori Scarlatos, (516) 682-8416, mail stop D12-237.

Personals

We would like to express our most sincere thanks and deepest appreciation to all our friends, co-workers and associates at Grumman for their many kind expressions of sympathy and support afforded us as a result of the tragic loss of our daughter-in-law Claudia and granddaughter Jaime. The many cards, flowers, prayers and other thoughtful efforts helped to get us through the initial impact of this tragedy. We shall never forget this support we so desperately needed. **Joyce and Edw. Ellis Jr.**

I would like to thank my friends at Grumman for their thoughtful contribution and friendship during the recent loss of my mother. **Christopher Mills**

My son-in-law, James Saffery, his parents, my wife and I appreciate the kindness shown by all Grummanites, both personally and in support of the Leukemia Society, at the passing of my daughter, Myra Oram Saffery. Support of the Grumman family is always important, but never more so than now. **Peter B. Oram**

My family and I wish to express our sincere appreciation and thanks to all our friends and co-workers for their kind expressions of support and sympathy during the recent loss of my father. **Don Peters**

The families of **Ernest Braun Jr.** and **Ernest Braun Sr.** wish to extend to all our friends at Grumman and Grumman Data our thanks for their kindness and gift to the American Heart Association during the recent loss of our daughter and grandchild.

We would like to express our sincere thanks to all our friends and co-workers at Grumman for their kind expressions of sympathy and support during the recent loss of our father Nonno Joe. **The Francino Family**

My son's and I would like to thank all Ray's friends and co-workers for their support and kindness during our recent loss. **Mary Sablynski**

My family and I wish to thank all our friends and co-workers for their kind expressions of sympathy during the recent loss of my mother Frances. **George Serviss**

My family and I wish to extend our sincerest thanks to all of our friends and co-workers at Grumman, especially Melbourne Systems, for their cards, flowers and kind expressions of sympathy during the recent loss of my mother. **Liz Cummings**

My family and I wish to extend our sincere thanks to all Dick's friends and co-workers for their kindness, sympathy and support expressed during our recent loss. **Marilyn Ayres**

My family and I wish to express our gratitude to all our friends and co-workers for their kindness, generosity and loving support after the sudden death of my husband Bill. **Rachel Antippa**

I wish to extend my sincere appreciation and thanks to all my friends and co-workers for their visits, calls, cards and flowers during my recent illness. **Jerry Rosen**

I would like to express my sincere appreciation and thanks to all the Grumman personnel who have donated blood to the Grumman Blood Program. The blood was used during my wife Mary's serious operation and was replaced to Monroe Regional Medical Center in Ocala, Florida by the Grumman Blood Program. **Henry T. Clements**

My family and I would like to thank all my friends at Grumman for their thoughtfulness and expressions of sympathy during the recent loss of my father. **Christine Incandela**